



6. HOW DO YOU COLOUR GLASS?

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INTRODUCTION

The commonest way of colouring glass is to add metal oxides, although other chemicals may also be used. The substances used range from precious metals such as gold, which imparts a ruby red, to more unusual colourants such as arsenic, which in combination with lead produces a dense white colour.

Both the composition of the glass and the conditions under which the glass was melted are of significance in determining the final colour. Since so many different parameters are at work, it may be extremely difficult to ensure that certain colours are identical every time they are made. Ruby red glass is particularly difficult, as are most other red and yellow hues. Other colours, such as cobalt blue, are easier; the hue produced is nearly always identical.

If the raw materials of the glass contain impurities, the result will be a shade of green whose strength will depend on the proportion of colour-imparting contaminants present in the glass. The finest glass-making sand, which still only contains a few hundredths of a percent of iron oxide, gives soda glass a greenish hue.

Since raw materials without impurities are expensive, glassmakers



Figure 6.1 Fish graal by Jan-Erik Ritzman, Transjö Glassworks.